Monitoring Data Record

Project Title: R-2231B Myrick Pond COE Action ID: 199400590
Stream Name: Myrick Pond DWQ Number: 000874
City, County and other Location Information: Richmond County, Ellerbe Bypass (Station 141+40 LT.
Date Construction Completed: September 2005
Monitoring Year: (2) of 5
Ecoregion: 8 digit HUC unit 03040203
USGS Quad Name and Coordinates:
Rosgen Classification:
Length of Project: 702' Urban or Rural: Rural Watershed Size:
Monitoring DATA collected by: M. Green, J. Young and B. Clements Date: 7/17/08
Applicant Information:
Name: NCDOT Roadside Environmental Unit
Address: 1425 Rock Quarry Road Raleigh, NC 27610
Telephone Number: (919) 861-3772 Email address: mlgreen@dot.state.nc.us
Consultant Information:
Name:
Address:
Telephone Number: Email address:
Project Status: Complete

Monitoring Level required by COE and DWQ (404 permit/ 401 Cert.): Level (**1**) ~~2~~ ~~3~~
Monitoring Level 1 requires completion of *Section 1, Section 2 and Section 3*

Permit States: The permittee shall provide reference photographs, channel stability analysis, and biological data on a yearly basis. Reference photographs, both longitudinal and lateral, should be taken at least twice a year, preferably in winter and summer and at permanently established locations. Perpendicular transects or cross sections should be permanently established at selected points on the designed reach where channel width, depth, cross-sectional area, and lateral photographs will be collected and provided in the annual monitoring reports. Cross sections shall be established once every 20 bankfull widths and will be divided evenly between riffle and pool bed features. Additional cross sections should be considered for areas where there are structures or other areas where there is a chance of failure.

The Myrick Pond Mitigation Site provides approximately 702 linear feet of stream restoration. The stream was never constructed but left to develop the channel naturally. Since, there was no construction on the channel the Army Corp of Engineers decided that full channel monitoring was not required. However, the stream will be visually monitored for five years.

Section 1. PHOTO REFERENCE SITES
(Monitoring at all levels must complete this section)

Total number of reference photo locations at this site:
A total of 13 photos were taken from 7 photo point locations.
Dates reference photos have been taken at this site: 7/24/07, 1/7/08, 7/17/08
Individual from whom additional photos can be obtained (name, address, phone):

Other Information relative to site photo reference:

If required to complete Level 3 monitoring only stop here; otherwise, complete section 2.

Section 2. PLANT SURVIVAL
Attach plan sheet indicating reference photos.

Identify specific problem areas (missing, stressed, damaged or dead plantings):

Estimated causes, and proposed/required remedial action:

ADDITIONAL COMMENTS: Myrick Pond was planted in the winter of 2004. The site was replanted in December 2006 due to low survivability prior to the start of the monitoring period. Planted vegetation included black willow, silky dogwood, tag alder, yellow poplar, sycamore, water oak, and green ash. Beaver activity was noted during the last evaluation on site. Since, then the beavers have been removed from the site and some additional planting took place on 4/8/08 to replace the missing seedlings. Other vegetation noted onsite included *Sagittaria* sp., red maple, *Juncus* sp., tear-thumb, fennel, cut grass, cattail, briars, and various wetland species.

If required to complete Level 1 and Level 2 monitoring only stop here; otherwise, complete section 3.

Section 3. CHANNEL STABILITY

Visual Inspection: The entire stream project as well as each in-stream structure and bank stabilization/revetment structure must be evaluated and problems addressed.

Report on the visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. Include a discussion of any deviations from as-built and an evaluation of the significance of these deviations and whether they are indicative of a stabilizing or destabilizing situation.

The Myrick Pond Stream Mitigation Site is stabilized for the Year 2 Summer evaluation. A bankfull event was noted during this time of monitoring. The stream was highly vegetated and stable at the time of monitoring. The cross vanes at the outlet end of the pipe are stable and functioning properly. NCDOT will continue to monitor this stream restoration site.

Date	Station Number	Station Number	Station Number	Station Number	Station Number
Structure Type					
Is water piping through or around structure?					
Head cut or down cut present?					
Bank or scour erosion present?					
Other problems noted?					

Myrick Pond

Photo Point #1 (Upstream)

Photo Point #1 (Downstream)

Photo Point #2 (Upstream)

Photo Point #2 (Downstream)

Photo Point #3 (Upstream)

Photo Point #3 (Downstream)

Myrick Pond

Photo Point #4 (Upstream)

Photo Point #4 (Downstream)

Photo Point #5 (Upstream)

Photo Point #5 (Downstream)

Photo Point #6 (Looking Towards Vegetation Plot 1)

Photo Point #6 (Looking Towards Vegetation Plot 2)

Myrick Pond

Photo Point #7 (Looking Downstream @ the Outlet End of the Culvert)

MYRICK POND MITIGATION SITE